

INFORMATION DISCLOSURE STATEMENT BY THE APPLICANT

Serial No.:	10/783,326
Filing Date:	2/20/2004
First Inventor:	Czaplicki
Art Unit:	1712
Examiner:	Robert E. Sellers
Attorney Docket Number:	1001.133

Examiner's Signature	/Robert Sellers/	Date Considered	09/07/2006
-------------------------	------------------	--------------------	------------


Examiner's Initials	Document Number	Publication Date MM-DD-YYYY	Name of Inventor or Author
RS	6,455,146	6/24/2002	Fitzgerald
	6,060,556	5/9/2000	Denzinger et al.
	5,852,136	12/22/1998	Green
	5,750,595	5/12/1998	Arora et al.
	5,746,935	5/5/1998	Corley et al.
	5,739,185	4/14/1998	Haneishi et al.
	5,719,210	2/17/1998	Arora et al.
	5,602,211	2/11/1997	Hefner, Jr. et al.
	5,629,379	5/13/1997	Harper
	5,596,050	1/21/1997	Gardner et al.
	5,545,694	8/13/1996	Satake et al.
	5,536,790	7/16/1996	Stein
	5,527,839	6/18/1996	Walker
	5,525,650	6/11/1996	Clark et al.
	5,521,274	5/28/1996	Wilford
	5,472,998	12/5/1995	Tessmer et al.
	5,466,764	11/14/1995	Hiraoka
	5,447,974	9/5/1995	Peng
	5,385,977	1/31/1995	Faul et al.
	5,362,805	11/8/1994	St. Clair
	5,342,885	9/30/1994	St. Clair
	4,720,523	1/19/1988	Dickie et al.
	4,687,812	8/18/1987	Dickie et al.
	4,647,624	3/3/1987	Stamberger
	4,639,493	1/27/1987	Dickie et al.
	4,617,348	10/14/1986	Dickie et al.
RS	4,707,518	11/17/1987	Shah
	4,601,769	7/22/1986	Dehoff

INFORMATION DISCLOSURE STATEMENT BY THE APPLICANT

Serial No.:	10/783,326
Filing Date:	2/20/2004
First Inventor:	Czaplicki
Art Unit:	1712
Examiner:	Robert E. Sellers
Attorney Docket Number:	1001.133

Examiner's Signature	/Robert Sellers/	Date Considered	09/07/2006
-------------------------	------------------	--------------------	------------

Examiner's Initials	Document Number	Publication Date MM-DD-YYYY	Name of Inventor or Author
RS	EP 1035440 A1 (Abstract)		Mitsubishi Gas Chemical Co. Inc.
	WO96/00754 (Abstract)		3M
	WO95/33785 (Abstract)		ICI Composites Inc.
	WO95/16720 (Abstract)		BASF
	WO95/11284 (Abstract)		Henkel
	GB 2250512 (Abstract)		MIRKIND LA
	GB 2237019 (Abstract)		BABKINA M M
	SU 1781265 (Abstract)		Precise Equip. Res. Inst.
	SU 1622373 (Abstract)		Yaroslavskii Polytechnic
	EP 272427 (Abstract)		BASF
	JP 60/106871 (Abstract)		Sunstar Giken Co.
	SU 765332 (Abstract)		Petrosyan VA
	SU 763429 (Abstract)		Petrosyan VA
	SU 757576 (Abstract)		Petrosyan VA
	EP 0 819 723 A	1/21/1998	Toray Industries
	EP 1 072 647 A	1/31/2001	Hong Seong Chemical Co. Ltd.
	WO03/085063	10/16/2003	L&L Products, Inc.
RS	WO03/018688	3/6/2003	L&L Products, Inc.

INFORMATION DISCLOSURE STATEMENT BY THE APPLICANT		Serial No.:	10/783,326
		Filing Date:	2/20/2004
		First Inventor:	Czaplicki
		Art Unit:	1712
		Examiner:	Robert E. Sellers
		Attorney Docket Number:	1001.133
Examiner's Signature	/Robert Sellers/	Date Considered	09/07/2006
Examiner's Initials	Non-Patent Literature		
RS	BAZILYAK et al., Polyglycidyl phenol-formaldehyde resins with peroxide groups and rubber-containing compositions on their base, Ukr. Khim. Zh., Vol. 67, No. 1, 2001, pp. 61-64. (Abstract)		
	BUDRUGEAC, Thermal egradation of glass reinforced epoxy resin and polychloroprene rubber: The correlation of kinetic parameters of isothermal accelerated aging with those obtained from non-isothermal data, Polym Degradation Stab, Vol. 74, No. 1, 2001, pp. 125-132. (Abstract)		
	BAHARIN et al., Electron beam irradiation of epoxidized natural rubber: FTIR studies, Polym Int, Vol. 49, No. 12, 2000, pp. 1693-1701. (Abstract)		
	ARANGUREN et al., Curing Kinetics of epoxy-urethane copolymers, J. Appl. Polym. Sci., Vo. 79, No. 10, 2001, pp. 1771-1779. (Abstract)		
	DISPENZA et al., Cure Kinetics of a tetrafunctional rubber modified epoxy-amine system, Thermal Analysis and Calorimetry, Vol. 61, No. 2, 2000, pp. 579-587. (Abstract)		
	SANCAKTAR et al., Selective use of rubber toughening to optimize lap-joint strength, American Society of Mechanical Engineers, Vol. 105, 1999, pp. 113-138. (Abstract)		
	MARTIN et al., Effect of prepreg resin composition on honeycomb core crush, International SAMPE Symposium and Exhibition, Vol. 43, No. 1, 1998, pp. 366-375. (Abstract)		
	LOWE et al., Fatigue and fracture behaviour of novel rubber modified epoxy resins, Polymer, Vol. 37, No. 4, 1996, pp. 565-572. (Abstract)		
	SHUMSKY et al., Kinetics of formation of heterocyclic polymer networks: II. Rheological study, Journal of Polymer Engineering, Vol. 13, No. 3, 1994, pp. 241-247. (Abstract)		
	PRIVALKO et al., Kinetics of formation of heterocyclic polymer networks: 1. Calorimetric study, Journal of Polymer Engineering, Vol. 13, No. 3, 1994, pp. 223-239. (Abstract)		
 RS	ZUKAS, Torsional braid analysis of the aromatic amine cure of epoxy resins, Journal of Applied Polymer Science, Vol. 53, No. 4, 1994, pp. 429-440. (Abstract)		
RS	CHENG et al., Chemorheology of epoxy resin part II polyurethane-cross-		

INFORMATION DISCLOSURE STATEMENT BY THE APPLICANT		Serial No.:	10/783,326	
		Filing Date:	2/20/2004	
		First Inventor:	Czaplicki	
		Art Unit:	1712	
		Examiner:	Robert E. Sellers	
		Attorney Docket Number:	1001.133	
Examiner's Signature	/Robert Sellers/		Date Considered	09/07/2006
Examiner's Initials	Non-Patent Literature			
RS	linked epoxy resin cured with a tertiary amine, Journal of Materials Science, Vol. 29, No. 4, 1994, pp. 887-893. (Abstract)			
	CHENG et al., Chemorheology of epoxy resins Part I Epoxy resin cured with tertiary amine, Journal of Materials Science, Vol. 29, No. 3, 1994, pp. 721-722. (Abstract)			
	WASSERMAN et al., Relaxations in thermosets. XXV. Calorimetric studies of the curing kinetics of pure and rubber-containing epoxy-based thermosets, Journal of Applied Polymer Science, Vol. 48, No. 5, 1993, pp. 905-919. (Abstract)			
	CHEN et al., Rubber-modified epoxies .I. Influence of presence of a low level of rubber on the polymerization, Polymer International, Polymer International, Vol. 32, No. 2, 1993, p. 361-367. (Abstract)			
	ROYCHOUDHURY et al., FTIR and NMR studies on crosslinking reaction between chlorosulfonated polyethylene and epoxidized natural rubber, Rubber Chemistry and Technology, Vol. 66, No. 2, 1993, pp.230-241. (Abstract)			
	WANG et al., Relaxations in thermosets. XX. Dielectric and curing kinetics of elastomer-containing epoxide thermoset composites, Plast Rubber Compos Process, Vol. 17, No. 5, 1992, pp. 289-297. (Abstract)			
	GRILLET et al., Influence of a two-step process and of different cure schedules on the generated morphology of a rubber-modified epoxy system based on aromatic diamines, Polymer, Vol. 33, No. 1, 1992, pp. 34-43. (Abstract)			
	ZAPPUNNAYA et al., Effect of monoethanolamine derivatives on formation of epoxide-rubber compositions, Ukr Khim Zh, Vol. 57, No. 8, 1991, pp. 889-894. (Abstract)			
	EBICH, Effect of phase organization in rubber-epoxide composites on their curing kinetics, Polym Sci USSR, Vol. 31, No. 10, 1989, pp. 2429-2433. (Abstract)			
	DECKER, Photoinitiated crosslinking polymerization of monomer blends, Polymer Preprints, 2001, pp. 761-762. (Abstract)			
RS	HAYES et al., Toughened VARTM resins using epoxy-rubber adducts, Revolutionary Materials: Technology and Economics, 2000, pp. 294-303.			

INFORMATION DISCLOSURE STATEMENT BY THE APPLICANT		Serial No.:	10/783,326
		Filing Date:	2/20/2004
		First Inventor:	Czaplicki
		Art Unit:	1712
		Examiner:	Robert E. Sellers
		Attorney Docket Number:	1001.133
Examiner's Signature	/Robert Sellers/	Date Considered	09/07/2006
Examiner's Initials	Non-Patent Literature		
RS	(Abstract)		
	KIM et al., Kinetics and thermal characterization of epoxy-amine systems, Journal of Applied Polymer Science, 1999, pp. 2401-2408. (Abstract)		
	KIM et al., Thermal decomposition of a system consisting of epoxy resin and butadiene-acrylonitrile rubber with blocked carboxyl end-groups, Polimery, 1998, pp. 685-690. (Abstract)		
	ZHANG et al, Polymerization-induced bimodal phase separation in a rubber-modified epoxy system, Journal of Applied Polymer Science, 1999, pp. 59-67. (Abstract)		
	FUKUDA et al, Development of liquid silicone rubbers and new products (I), Technology on Adhesion & Sealing, 1992, pp. 25-32. (Abstract)		
	MAISTROS et al., Effect of brominated Bisphenol A on the cure, morphology and properties of epoxy/CTBN blends, Polymat '94, 1994, pp. 483-486. (Abstract)		
	JO et al., Effect of reactivity on cure and phase separation behavior in epoxy resin modified with thermoplastic polymer: a Monte Carlo simulation approach, Macromolecules, 1994, pp. 7815-7824. (Abstract)		
	BUSSI et al., Partially Miscible Blends of Epoxy Resin and Epoxidized Rubber: Structural Characterization of the Epoxidized Rubber and Mechanical Properties of the Blends, J. Appl. Polym. Sci., 1994, pp. 441-454. (Abstract)		
	KIM et al., Rubber Modified Epoxy Resin. I. Cure Kinetics and Chemorheology, Polym. Eng. Sci., 1994, pp. 625, 631. (Abstract)		
	WANG et al., Relaxations in Thermosets. XXII. Curing Kinetics and the Dielectric Properties of an Elastomer Containing Epoxide Cured With Ancamide, Polymer, 1992, pp. 4951-4960. (Abstract)		
	GERALD et al., Introduction of a Rubbery Interphase in Glass/Epoxy Composite Materials: Influence of the Interlayer Thickness of the Viscoelastic and Mechanical Properties of Particulate and Unidirectional Composites, Controlled Interphases in Composite Materials, 1990, pp. 441-448. (Abstract)		
RS	AMDOUNI et al., Coated Glass Beads Epoxy Composites: Influence of the Interlayer Thickness on Pre-Yielding and Fracture Properties, J. Mater. Sci., 1990, pp.1435-1443. (Abstract)		

INFORMATION DISCLOSURE STATEMENT BY THE APPLICANT		Serial No.:	10/783,326
		Filing Date:	2/20/2004
		First Inventor:	Czaplicki
		Art Unit:	1712
		Examiner:	Robert E. Sellers
		Attorney Docket Number:	1001.133
Examiner's Signature	/Robert Sellers/	Date Considered	09/07/2006
Examiner's Initials	Non-Patent Literature		
RS	PEZZATI et al., Epoxy Polymers: Effect of the Elastomer on the Kinetics of Polymerization, Thermochim. Acta, 1987, pp. 29-35. (Abstract)		
	LIN et al., Glass Beads Filled Epoxy System. Toughening Effect of Elastomer Introduced Interphase on Strength Properties, Polymer Composites. 28 th Microsymposium on Macromolecules, 1985, pp.54. (Abstract)		
	GOH et al., Thermal Latency of Novel Chelating Borate Catalysts as Latent Catalysts for Epoxy-Phenolic Resins, Journal of Polymer Science: Polymer Chemistry Edition 2002, Vol. 40, No. 15, 2002, pp. 2702-2716. (Abstract)		
	SHIN-YU WU et al., Polysiloxane Modified epoxy Networks. IV. Catalytic Effect on Fracture Behaviors of Jointed Interpenetrating Polymer Networks, Journal of Applied Polymer Science 2002, Vol. 84, No.13, 2002, pp. 2352-2357. (Abstract)		
	FARRIS et al., New Epoxy Tougheners Widen the Adhesive-Formulating Window, Adhesives & Sealants Industry, Vol. 9, No. 1, 2002, pp. 30-35. (Abstract)		
	PUSKAS et al., Macromolecular Engineering Via Carbocationic Polymerization: Branched Structures, Block Copolymers and Nanostructures, Macromolecular Materials and Engineering, Vol. 286, No. 10, 2001, pp. 565-582. (Abstract)		
	DISPENZA et al., Reactive Blending of Functionalized Acrylic Rubbers and Epoxy Resins, Polymer Engineering and Science, Vol. 41, No. 9, 2001, pp. 1486-1496. (Abstract)		
	RATNA et al., Mechanical Characterization and Morphology of Carboxyl Randomized Poly(2-Ethyl Hexyl Acrylate) Liquid Rubber Toughened Epoxy Resin, Polymer, Vol. 42, No. 18, 2001, pp. 7739-7749. (Abstract)		
	OYAMA et al., Kinetics and Mechanism of Coupling of Functionalized Chains at the Immiscible Polymer-Polymer Interface, Macromolecule, Vol. 34, No. 10, 2001, pp. 3331-3338. (Abstract)		
↓ RS	KUMAR et al., Preparation and Characterization of Siliconized Epoxy/Bismaleimide (N,N'-Bismaleimido-4,4'-Diphenyl Methane) Intercrosslinked Matrices for Engineering Applications, Journal of Applied Polymer Science, Vol. 81, No. 1, 2001, pp. 38-46. (Abstract)		

INFORMATION DISCLOSURE STATEMENT BY THE APPLICANT		Serial No.:	10/783,326
		Filing Date:	2/20/2004
		First Inventor:	Czaplicki
		Art Unit:	1712
		Examiner:	Robert E. Sellers
		Attorney Docket Number:	1001.133
Examiner's Signature	/Robert Sellers/	Date Considered	09/07/2006
Examiner's Initials	Non-Patent Literature		
RS	DOU DONGYOU et al., Graft Interpenetrating Polymer Networks Containing Ionic Bond, China Synthetic Rubber Industry, Vol. 23, No. 3, 2000, pp. 184. (Abstract)		
	POH et al., Cure Index and Activation Energy of Vulcanization of Natural Rubber and Epoxidized Natural Rubber Vulcanized in the Presence of Antioxidants, Journal of Applied Polymer Science, Vol. 77, No. 14, 2000, pp. 3234-3238. (Abstract)		
	BROCKMANN et al., Mechanism of the Curing Reaction of Model Epoxy Compounds with Monuron, International Journal of Adhesion & Adhesives, Vol. 20, No. 4, 2000, pp. 333-340. (Abstract)		
	BROWNE et al., Structure/Activity Correlations in Imidazoles for Epoxy Cure, Adhesion '99 Conference Proceedings, 1999. (Abstract)		
	TSENG et al., Preparation and Epoxy Curing Nonylphenol/Dicyclopentadiene Adducts, Journal of Applied Polymer Science, Vol. 74, No. 9, 1999, pp. 2196-2206. (Abstract)		
	WEGMAN et al., Novel Waterbourne Amine Hardeners for Ambient Curing Epoxy Coatings, European Coatings Journal, No. 5, 1999, pp. 34/43. (Abstract)		
	GIRARD-REYDET et al., Use of Block Copolymers to Control the Morphologies and Properties of Thermoplastic/Thermoset Blends, Polymer, Vol. 40, No. 7, 1999, pp. 1677-1687. (Abstract)		
	XUE-HUI WANG et al., Toughening of Nylon With Epoxidised Ethylene Propylene Diene Rubber, Polymer, Vol. 39, No. 12, 1998, pp. 2697-2699. (Abstract)		
	KUDVA et al., Compatibilization of Nylon 6/ABS Blends Using Glycidyl Methacrylate/Methyl Methacrylate Copolymers, Polymer, Vol. 39, No. 12, 1998, pp. 2447-2460. (Abstract)		
	SPRENGER et al., Elastomer-Modified Epoxy Prepolymers-The New Generations, Eur.Adhes. & Seal, Vol. 14, No. 3, 1997, pp. 9-12. (Abstract)		
RS	XUE-HUI WANG et al., Toughening of Poly(Butylene Terephthalate) with Epoxidised Ethylene Propylene Diene Rubber, Polymer, Vol. 38, No. 7, 1997, pp. 1569-1572. (Abstract)		

INFORMATION DISCLOSURE STATEMENT BY THE APPLICANT		Serial No.:	10/783,326
		Filing Date:	2/20/2004
		First Inventor:	Czaplicki
		Art Unit:	1712
		Examiner:	Robert E. Sellers
		Attorney Docket Number:	1001.133
Examiner's Signature	/Robert Sellers/	Date Considered	09/07/2006
Examiner's Initials	Non-Patent Literature		
RS	PEARCE et al., Rubber Toughening of Practical Tetraglycidyl Methylenedianiline-Piperidine Adduct Systems, Polymer, Vol. 37, No. 7, 1996, pp. 1137-1150. (Abstract)		
	LEE et al., Polysulphides as Epoxy Matrix Modifiers, Euradh '94. Conference Proceedings, 1994. (Abstract)		
	PEARSON et al., Recent Advances in Rubber-Modified Epoxy Polymers, Antec '95. Vol. II. Conference Proceedings, 1995. (Abstract)		
	HARE, Introduction to Coating Binders-Natural Resins, Surface Coatings Int., Vol. 78, No. 6, 1995, pp. 258-262. (Abstract)		
	SIEBERT et al., CTBN-Modified Epoxy Work in Poor Bonding Conditions, Adhesives Age, Vol. 29, No. 8, 1986, pp. 19-23. (Abstract)		
RS	International Search Report dated September 28, 2004. PCT/US2004/005514 (1001.133WO)		